

REMARKS

Claims 1-13 are pending in the application. Claims 1-13 stand rejected under § 102 as being anticipated by Lo U.S. Patent 5,911,044. The rejection is respectfully traversed.

The present invention provides an adaptive driver. The adaptive driver is able to automatically determine scan peripheral capabilities and configure a scan driver from driver modules to permit a scan job to be conducted even when a scan driver for the peripheral has not been provided. In claim 1, a scan peripheral is queried for the capability descriptor. The program then configures the scan driver when a scan job is requested by linking a set of pre-stored driving modules. The driving modules are linked according to user set parameters in the scan job and capabilities in a stored information capability descriptor concerning the scan peripheral to which the scan job is directed. The examiner applies Lo to these features, but the interpretation of the Lo reference is incorrect. Similar errors arise in the attempt to apply the Lo reference to the other independent claims.

Nothing in Lo describes linking a set of pre-stored driving modules as required by claim 1, linking driver modules from a set of driver modules and controlling a scan job according to the driver modules as required by claim 8, or configuring the scan driver module from a set of scan driver modules as required by claim 13. This is explicitly contradicted by Lo, in fact, because Lo describes the very same conventional process that is overcome by the presently claimed invention. In column 5, beginning at line 31, Lo explicitly describes that the scan peripherals in the system of Lo require a "software or source device driver 42" which "is software which controls the image acquisition device and is written by the device developer to comply with TWAIN specifications". Lo goes on to explain that "the source device driver 42 is usually written by the manufacturer of the scanner 50. The source device driver 42 may be installed in a manner which analogous to installing a print driver in a Windows based computer." Nothing in any of the embodiments of Lo discloses

constructing a scan driver according to capability descriptors and pre-stored driving modules as is required in varying scope by each of independent claims 1, 8 and 13. Lo assumes that a driver for the scanner is available from the manufacturer and never discusses creating a scan driver based upon driver modules. Instead, what Lo discloses is a system and methods that permit a client computer to communicate over a network to control a scanner, but in each case it is assumed that the driver that is provided by the manufacturer is available to control the scan operation.

Perhaps the examiner has viewed the TWAIN interface as a scan driver, but the above-cited portion of column 5 and the remaining portions of the Lo patent contradicts such an interpretation. TWAIN and the packet structure, such as those shown in Figs. 7A-7L, require a pre-written manufacturer's driver 42. There is a method disclosed for communication packets that allows the creation of a scan job from a client computer, but the creation of a scan job by a client is not the same as the configuring of a driver module as is claimed. Each of the portions of Lo cited by the examiner relates to communication packets for creating a scan job and assumes that the device driver 42 that is pre-written by the manufacturer is available for the scanner that would be accessed by the scan job.

The examiner cites column 12, lines 7-50 and column 15, line 34 through column 16, line 64 and step 468 in Fig. 8B. The portion of column 12 only discusses the communication of scanner settings to a client so that the client may select "the ranges and possible settings of the scanner" for a particular scan job. There is no discussion of configuring a set of modules based upon this information, and the figure mainly concerns the TWAIN style packet that will be used for the communication of the information to the client. The portion in columns 15 and 16 discusses the display of the scanner settings at the client computer 102. This again allows the client to choose settings so that a scan job may be conducted, but there is no disclosure of forming a driver from a set of modules, as again Lo relies upon the driver 42 provided by the manufacturer. The examiner also likens the TWAIN driver to the scan driver, but this contradicts Lo's disclosure of a device driver 42 and the


definition of TWAIN as a “standard software protocol and API (application programming interface) for communication between software applications and image acquisition devices (the source of the image data).” In sum, there is no support anywhere in Lo for anything other than a “source device driver 42” that “may be installed in a manner which is analogous to installing a print driver in a windows-based computer.”

Claim 12 is now addressed. Claim 12 specifies a peripheral that stores in its memory a scan capability descriptor and communicates the capability descriptor in response to a query requesting the same. No such scan device is disclosed in Lo. The scanners 50 or 144 utilized in Lo are conventional scanners. The examiner points to portions of column 8 and column 9 as disclosing a peripheral including a scanning capability that stores a scan capability descriptor in its memory. Nothing in this portion of Lo discloses that the scan device 50 or 144 stores a capability descriptor or responds to queries regarding the same. Instead, the portion cited by the examiner discusses storing of information by the scanner server computer 130, and not the scan device 144 shown in the same figures. The scanner server computer 130 creates a scanner image table 160 shown in Fig. 5 and other information that permits a client to execute a scan job over the network. Nowhere is there any discussion of the scanner 144 or the scanner 50 discussed earlier in the specification of storing a capability descriptor. As discussed in the instant specification, when a scanner provides a capability descriptor it facilitates the automatic creation of a scan driver as is enabled by certain embodiments of the invention.

For all of the above reasons, applicants request reconsideration and allowance of the application. The separate patentability of claims not specifically discussed is maintained. If an interview would help expedite prosecution or if the examiner has any questions concerning this case, the examiner is invited to contact the undersigned attorney at the below listed number.

Respectfully submitted,

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August 25, 2004

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